

Research Note

Clarification of the authorship and date of publication of three Asian species of Unionidae (Bivalvia)

Recently, Petit and Coan (2008) reviewed the molluscan taxa made available in Griffith and Pidgeon (1833–1834), the English translation of Cuvier's *Le Règne Animal* (1830). They determined that plate 21, containing the figures of *Unio leai* (fig. 1), *Unio douglasiae* (fig. 2), and *Unio grayii* (fig. 3), was dated 1833 and that the three species take their date of publication from this date and not the date of the volume [1834]. Petit and Coan reported the correct authorship of the first two species as being Gray in Griffith and Pidgeon, 1833. Haas (1969) listed *Unio leai* as *Lamprotula leai* (Gray in Griffith, 1834) and used *Unio douglasiae* Griffith and Pidgeon, 1834. Correction of authorship and date of publication for these two species does not have any effect on their synonymies.

Unio grayii was the third species illustrated on plate 21, figure 3. This taxon was listed in the index of the Griffith and Pidgeon volume, attributed to Lea, but no geographic location was given. Given that this taxon was attributed to Lea, Petit and Coan (2008) did not discuss it. However, Lea did not describe a taxon *Unio grayii* but did describe *Unio grayanus* Lea, 1834 (see Scudder, 1885). In discussions with Petit and Coan, they confirmed that the figure caption of plate 21 of Griffith and Pidgeon indicates that *Unio grayii* was in fact described by Gray in Griffith and Pidgeon in 1833, and not by Lea as erroneously listed in the index.

The history of the use of *Unio grayii* is examined. Conrad (1853) erected *Lanceolaria* as a subgenus of *Unio* and used *Unio grayanus* Lea, 1834 as the type species. Simpson (1900, 1914) treated *Lanceolaria* as a section of *Nodularia* Conrad, 1853. He listed *Nodularia (Lanceolaria) grayana* (Lea, 1834) and included "*Unio grayii* Griffith, Grif. Cuv., 1834" as a junior synonym. Haas (1969) recognized *Unio grayana* Lea, 1834 and placed it in *Lanceolaria* as a genus separated from *Nodularia*, but failed to include any mention of *Unio grayii*. Liu (1979) reported *Lanceolaria grayana* from China and included *Unio grayii* as a junior synonym. Dặng et al. (1980) recognized *Lanceolaria grayi* [sic] (Griffith and Pidgeon, 1834) as a species separated from *Lanceolaria grayana* (Lea, 1834) from north Viet Nam.

The correct authorship and date of publication for *Unio grayii* is Gray in Griffith and Pidgeon, 1833. The *Unio grayii* figure is based on a specimen supplied by Gray. A preliminary search by Jonathan Ablett, Mollusk Collections, The Natural History Museum, London, did not produce the type specimen of *Unio grayii*. Dặng (1980) commented that Moskvicheva (1973) separated

L. grayii with zigzag tubercles and ridges along the dorsal-slope from *L. grayana* with only tubercles and no dorsal ridges.

If these taxa are treated as separate species there is no difficulty. However, if *Unio grayii* is assumed to be synonymous with *Unio grayanus* as used by Simpson (1900, 1914) and Liu (1979), then with the revised date of publication for *Unio grayii*, *Lanceolaria grayii* (Gray in Griffith and Pidgeon, 1833) becomes the senior synonym of *Lanceolaria grayana* (Lea, 1834) based on date priority. This case does not meet both conditions of Article 23.9.1 of the Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999) to preserve prevailing usage of *Unio grayanus* Lea, 1834 as the accepted name because *Unio grayii* has been used in the years after 1899 (see Dặng et al., 1980).

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